NCBI   **Nucleotide**

Search | Nucleotide ▼ | for | | Go | Clear |

Limits   Index   History   Clipboard

Display | Default View ▼ | as | HTML ▼ | Save | Add to Clipboard |

☐ 1: U03911 **Human mutator gene**   PubMed Protein Related Sequences Taxonomy OMIM LinkOut
(hMSH2) mRNA, complete
cds

```
LOCUS       HSU03911     3080 bp     mRNA              PRI        06-JUN-1994
DEFINITION  Human mutator gene (hMSH2) mRNA, complete cds.
ACCESSION   U03911
VERSION     U03911.1  GI:454360
KEYWORDS    .
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 3080)
  AUTHORS   Fishel,R., Lescoe,M.K., Rao,M.R., Copeland,N.G., Jenkins,N.A.,
            Garber,J., Kane,M. and Kolodner,R.
  TITLE     The human mutator gene homolog MSH2 and its association with
            hereditary nonpolyposis colon cancer
  JOURNAL   Cell 75, 1027-1038 (1993)
  MEDLINE   94073959
REFERENCE   2  (bases 1 to 3080)
  AUTHORS   Fishel,R., Lescoe,M.K., Rao,M.R., Copeland,N.G., Jenkins,N.A.,
            Garber,J., Kane,M. and Kolodner,R.
  TITLE     The human mutator gene homolog MSH2 and its association with
            hereditary nonpolyposis colon cancer
  JOURNAL   Cell 77, 167 (1994)
  MEDLINE   94208055
REFERENCE   3  (bases 1 to 3080)
  AUTHORS   Kolodner,R.D.
  TITLE     Direct Submission
  JOURNAL   Submitted (02-DEC-1993) Richard D. Kolodner, Cell and Molecular
            Biology, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA
            02115, USA
COMMENT     On Feb 15, 1994 this sequence version replaced gi:439404.
FEATURES             Location/Qualifiers
     source          1..3080
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /chromosome="2"
                     /map="2p22-21"
     gene            4..2808
                     /gene="hMSH2"
     CDS             4..2808
                     /gene="hMSH2"
                     /note="homolog of S. cerevisiae Msh2p [Swiss-Prot
                     accession number P25847] and bacterial MutS proteins
                     [Swiss-Prot accession numbers P23909, P10339, and P27345]"
                     /codon_start=1
                     /protein_id="AAA18643.1"
                     /db_xref="GI:433147"
                     /translation="MAVQPKETLQLESAAEVGFVRFFQGMPEKPTTTVRLFDRGDFYT
                     AHGEDALLAAREVFKTQGVIKYMGPAGAKNLQSVVLSKMNFESFVKDLLLVRQYRVEV
```

```
              YKNRAGNKASKENDWYLAYKASPGNLSQFEDILFGNNDMSASIGVVGVKMSAVDGQRQ
              VGVGYVDSIQRKLGLCEFPDNDQFSNLEALLIQIGPKECVLPGGETAGDMGKLRQIIQ
              RGGILITERKKADFSTKDIYQDLNRLLKGKKGEQMNSAVLPEMENQVAVSSLSAVIKF
              LELLSDDSNFGQFELTTFDFSQYMKLDIAAVRALNLFQGSVEDTTGSQSLAALLNKCK
              TPQGQRLVNQWIKQPLMDKNRIEERLNLVEAFVEDAELRQTLQEDLLRRFPDLNRLAK
              KFQRQAANLQDCYRLYQGINQLPNVIQALEKHEGKHQKLLLAVFVTPLTDLRSDFSKF
              QEMIETTLDMDQVENHEFLVKPSFDPNLSELREIMNDLEKKMQSTLISAARDLGLDPG
              KQIKLDSSAQFGYYFRVTCKEEKVLRNNKNFSTVDIQKNGVKFTNSKLTSLNEEYTKN
              KTEYEEAQDAIVKEIVNISSGYVEPMQTLNDVLAQLDAVVSFAHVSNGAPVPYVRPAI
              LEKGQGRIILKASRHACVEVQDEIAFIPNDVYFEKDKQMFHIITGPNMGGKSTYIRQT
              GVIVLMAQIGCFVPCESAEVSIVDCILARVGAGDSQLKGVSTFMAEMLETASILRSAT
              KDSLIIIDELGRGTSTYDGFGLAWAISEYIATKIGAFCMFATHFHELTALANQIPTVN
              NLHVTALTTEETLTMLYQVKKGVCDQSFGIHVAELANFPKHVIECAKQKALELEEFQY
              IGESQGYDIMEPAAKKCYLEREQGEKIIQEFLSKVKQMPFTEMSEENITIKLKQLKAE
              VIAKNNSFVNEIISRIKVTT"
       polyA_site      3059
BASE COUNT      981 a     538 c     699 g     862 t
ORIGIN
        1 gacatggcgg tgcagccgaa ggagacgctg cagttggaga gcgcggccga ggtcggcttc
       61 gtgcgcttct ttcagggcat gccggagaag ccgaccacca cagtgcgcct tttcgaccgg
      121 ggcgacttct atacggcgca cggcgaggac gcgctgctgg ccgcccggga ggtgttcaag
      181 acccagggggg tgatcaagta catggggccg gcaggagcaa agaatctgca gagtgttgtg
      241 cttagtaaaa tgaattttga atctttgta aaagatcttc ttctggttcg tcagtataga
      301 gttgaagttt ataagaatag agctggaaat aaggcatcca aggagaatga ttggtatttg
      361 gcatataagg cttctcctgg caatctctct cagtttgaag atattctctt tggtaacaat
      421 gatatgtcag cttccattgg tgttgtgggt gttaaaatgt ccgcagttga tggccagaga
      481 caggttggag ttgggtatgt ggattccata cagaggaaac taggactgtg tgaattccct
      541 gataatgatc agttctccaa tcttgaggct ctcctcatcc agattggacc aaaggaatgt
      601 gttttacccg gaggagagac tgctggagac atggggaaac tgagacagat aattcaaaga
      661 ggaggaattc tgatcacaga aagaaaaaaa gctgactttt ccacaaaaga catttatcag
      721 gacctcaacc ggttgttgaa aggcaaaaag ggagagcaga tgaatagtgc tgtattgcca
      781 gaaatggaga atcaggttgc agtttcatca ctgtctgcgg taatcaagtt tttagaactc
      841 ttatcagatg attccaactt tggacagttt gaactgacta cttttgactt cagccagtat
      901 atgaaattgg atattgcagc agtcagagcc cttaaccttt tcagggttc tgttgaagat
      961 accactggct ctcagtctct ggctgccttg ctgaataagt gtaaaacccc tcaaggacaa
     1021 agacttgtta accagtggat taagcagcct ctcatggata agaacagaat agaggagaga
     1081 ttgaatttag tggaagcttt tgtagaagat gcagaattga ggcagacttt acaagaagat
     1141 ttacttcgtc gattcccaga tcttaaccga cttgccaaga gtttcaaag acaagcagca
     1201 aacttacaag attgttaccg actctatcag ggtataaatc aactacctaa tgttatacag
     1261 gctctggaaa aacatgaagg aaaacaccag aaattattgt tggcagtttt tgtgactcct
     1321 cttactgatc ttcgttctga cttctccaag ttttcaggaaa tgatagaaac aactttagat
     1381 atggatcagg tggaaaacca tgaattcctt gtaaaacctt catttgatcc taatctcagt
     1441 gaattaagag aaataatgaa tgacttggaa aagaagatgc agtcaacatt aataagtgca
     1501 gccagagatc ttggcttgga ccctggcaaa cagattaaac tggattccag tgcacagttt
     1561 ggatattact ttcgtgtaac ctgtaaggaa gaaaaagtcc ttcgtaacaa taaaaacttt
     1621 agtactgtag atatccagaa gaatggtgtt aaatttacca acagcaaatt gacttcttta
     1681 aatgaagagt ataccaaaaa taaaacagaa tatgaagaag cccaggatgc cattgttaaa
     1741 gaaattgtca atatttcttc aggctatgta gaaccaatgc agacactcaa tgatgtgtta
     1801 gctcagctag atgctgttgt cagctttgct cacgtgtcaa atggagcacc tgttccatat
     1861 gtacgaccag ccattttgga gaaaggacaa ggaagaatta tattaaaagc atccaggcat
     1921 gcttgtgttg aagttcaaga tgaaattgca tttattccta atgacgtata ctttgaaaaa
     1981 gataaacaga tgttccacat cattactggc cccaatatgg gaggtaaatc aacatatatt
     2041 cgacaaactg gggtgatagt actcatggcc caaattgggt gttttgtgcc atgtgagtca
     2101 gcagaagtgt ccattgtgga ctgcatctta gcccgagtag gggctggtga cagtcaattg
     2161 aaaggagtct ccacgttcat ggctgaaatg ttggaaactg cttctatcct caggtctgca
     2221 accaaagatt cattaataat catagatgaa ttgggaagag aacttctac ctacgatgga
     2281 tttgggttag catgggctat atcagaatac attgcaacaa agattggtgc tttttgcatg
     2341 tttgcaaccc attttcatga acttactgcc ttggccaatc agataccaac tgttaataat
     2401 ctacatgtca cagcactcac cactgaagag accttaacta tgctttatca ggtgaagaaa
     2461 ggtgtctgtg atcaaagttt tgggattcat gttgcagagc ttgctaattt ccctaagcat
     2521 gtaatagagt gtgctaaaca gaaagccctg gaacttgagg agtttcagta tattggagaa
     2581 tcgcaaggat atgatatcat ggaaccagca gcaaagaagt gctatctgga aagagagcaa
     2641 ggtgaaaaaa ttattcagga gttcctgtcc aaggtgaaac aaatgccctt tactgaaatg
     2701 tcagaagaaa acatcacaat aaagttaaaa cagctaaaag ctgaagtaat agcaaagaat
```

```
2761 aatagctttg taaatgaaat catttcacga ataaaagtta ctacgtgaaa aatcccagta
2821 atggaatgaa ggtaatattg ataagctatt gtctgtaata gttttatatt gttttatatt
2881 aacccttttt ccatagtgtt aactgtcagt gcccatgggc tatcaactta ataagatatt
2941 tagtaatatt ttactttgag gacattttca aagattttta ttttgaaaaa tgagagctgt
3001 aactgaggac tgtttgcaat tgacataggc aataataagt gatgtgctga attttataaa
3061 taaaatcatg tagtttgtgg
```
//